

**METHOD AND APPARATUS FOR INDICATING
AN APPARENT ERROR IN THE OPERATION OF A
FLUID-POWERED THREAD-FORMING ATTACHMENT**

Abstract

5 The invention provides an improved method and apparatus for indicating
an apparent error in the operation of a fluid-powered thread-forming attachment
(A) mounted on a machine tool for controlled movement toward and away from
a workpiece (W) upon which a thread is to be formed during a thread-forming
cycle. The improved apparatus (60) broadly includes a fluid-powered actuator
10 (64) for selectively moving the thread-forming attachment (A) relative to work-
piece (W) during the cycle; a sensor (73) operatively arranged to monitor the
pressure within the actuator during at least a portion of the cycle, and arranged
to provide an output signal; and a programmable logic unit (75) provided with
the sensor output signal, arranged to store minimum and maximum permissible
15 fluid pressure values expected during the cycle, and operatively arranged to
indicate an apparent error in the formation of a thread on the workpiece if the
pressure determined by the sensor is not between the stored minimum and
maximum values.